

FY07-LVIII(58)-149

“Spiritwood Energy Power Plant”

Submitted by: Great River Energy;
Principal Investigator: Greg Ridderbusch & Rick Lancaster

PARTICIPANTS

<u>Sponsor</u>	<u>Cost Share</u>
Great River Energy	\$ 155,000,000
NDIC	<u>\$ 2,000,000</u>
Total Cost	\$ 157,000,000
Project Schedule - 30 Months	Project Deliverables
Contract Date – 2/21/07	Status Reports:
Start Date – 5/1/06	4/1/07(✓); 12/31/07(✓);
Completion Date – 12/31/09	6/1/08 (✓); 4/1/09 ();
	Final Report 1/31/10()

OBJECTIVE / STATEMENT OF WORK:

Construct and operate a beneficiated lignite-fired combined heat & power plant near Spiritwood that would provide steam for a new ethanol plant and an expanded malting facility, while producing 35-50 MW of electric power.

STATUS

Through April 30, 2007

Major changes include an increase in the size of the power plant from 50 MW to 56 MWe net of baseload and 35 MWe net of peaking capability. Other significant work completed/initiated:

- Process Flow Diagrams and Stream Catalogs
- Electrical Single Line Diagram and Electrical Loads List
- Area & Site General Arrangement Drawings
- Pre-engineered building, tanks, pumps, boiler, exhaust stacks, water treatment system, large power transformer, cooling tower, and continued permitting

May 1, 2007 – December 31, 2007

Significant items completed/initiated during this reporting period include:

- The air permit-to-construct was received from the NDDH in September.
- A formal ground-breaking ceremony was conducted on November 6.
- Earthwork was 80% complete at the end of the 2007 construction season.
- Piling placement began in November for the main boiler and turbine building foundations.
- Underground utility work continues and is now at approximately 40% complete.
- Foundations are complete for the Multi-Purpose Building and the General Services Building.
- Work continues for the wastewater discharge permit and water treatment definition support.

January 1, 2008 – May 31, 2008

Significant items completed/initiated during this reporting period include:

- Erection of the Multipurpose Building is at approximately 80%.
- Erection of the Auxiliary Building is at approximately 50%.
- Earthwork is at 90% complete.
- Piling placement is complete for the main boiler and turbine building foundations.
- Underground utility work continues and is now at approximately 70% complete.
- The contractor for general construction was chosen and is set to begin work in late June.
- Work continues for the wastewater discharge and discussions are in progress with Stutsman Rural Water and the City of Jamestown.